



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/886,642

06/21/2001

Ivan N. Vukovic

CE08410R

6140

22917

7590

01/26/2005

MOTOROLA, INC.  
1303 EAST ALGONQUIN ROAD  
IL01/3RD  
SCHAUMBURG, IL 60196

EXAMINER

PEREZ, ANGELICA

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/886,642

Applicant(s)

VUKOVIC ET AL.

Examiner

Angelica M. Perez

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08/24/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/21/2001
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bender (Bender et al.; US patent No.: 6,366,779 B1) in view of Willenegger (Willenegger et al.; WO 00/57663).

Regarding claims 1, 8 and 15, Bender teaches in a broadband communication system, a method, apparatus and device for allocating a communication resource that comprises a reverse link traffic channel (column 4, line 14-18), the method comprising steps of: receiving a communication resource access request at a time that data received via the reverse traffic channel is currently being demodulated (column 10, lines 3-16; where it is inherent demodulation is occurring when the channel is being used by the mobile station while the base station is receiving the information; e.g., the "access probe"); and in response to receiving the communication resource access request, transmitting a grant of access to the reverse link traffic channel (column 10, lines 28-33; where the "grant of access" is completed by the transmission of the channel assignment messages).

Bender teaches of a reverse link traffic channel request, Bender does not specifically teach the feature in detail.

Art Unit: 2684

In related art, concerning reservation multiple access, Willenegger teaches of a reverse link traffic channel request, reverse link traffic channel being demodulated and grant of access to a reverse link traffic channel (pages 11, lines 22-24; corresponding to request and grant of access and page 12, lines 17-22; corresponding to demodulating while receiving the access request).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Bender's device for allocating a communication resource with Willenegger's reverse link traffic channel request and allocation in order to accelerate the allocation process in a multiple mobile stations, as taught by Willenegger.

Regarding claim 2, 9, and 16, Bender in view of Willenegger teaches all the limitations of claims 1, 8 and 15, respectively. In addition, Bender teaches where the access grant is transmitted prior to completion of the demodulation of the data (column 10, lines 25-33; where a "first traffic channel assignment" is assigned if the actual channel assignment exceeds the "access probe tail"; therefore, the channel assignment is granted before all the data is demodulated).

Regarding claim 3, 10 and 17, Bender in view of Willenegger teaches all the limitations of claims 1, 8 and 15, respectively. Bender further teaches where the step of transmitting a grant of access to the reverse link traffic channel comprises steps of: determining a time that a demodulator will be available; determining a time that a grant of access to the communication channel can be transmitted based on the time that the demodulator will be available (column 13, lines 1-5; where the "probe tail" of the request period demodulation marks a period of availability of the demodulators); and

Art Unit: 2684

transmitting an access grant based on the received request and on the determined time that the grant of access to the reverse link traffic channel can be transmitted (column 13, lines 6-15; where the base station "advertises" the probe tail period indicating the availability of the demodulator; therefore, the "grant of access" can be transmitted).

Regarding claim 4, 11 and 18, Bender in view of Willenegger teaches all the limitations of claims 3, 10 and 17, respectively. Bender further teaches where the step of transmitting a grant of access to the reverse link traffic channel further comprises a step of determining a time that the demodulator will finish demodulating the received message (column 13, lines 1-5; where the "probe tail" of the request period demodulation marks a time when the "grant of access" can be transmitted).

Regarding claim 5, 12 and 19, Bender in view of Willenegger teaches all the limitations of claims 3, 10 and 17, respectively. Bender further teaches where the step of transmitting a grant of access to the reverse link traffic channel further comprises a step of determining a time interval between the time that the demodulator will be available and the time that an access grant can be transmitted (column 13, lines 1-15; where the time comprises the period it takes for the acknowledgment to reach the mobile station).

Regarding claim 6, 14 and 20, Bender in view of Willenegger teaches all the limitations of claims 1, 8 and 15, respectively. Bender further teaches where the communication resource access request is a preamble (lines 8-9 of the abstract).

Regarding claim 7, 13, and 21, Bender in view of Willenegger teaches all the limitations of claims 1, 8 and 15, respectively. Bender further teaches where the access

grant is an acknowledgment (column 3, lines 38-49; where the "channel assignment" is confirmed by an acknowledgment).

Regarding claim 22, Bender in view of Willenegger teaches all the limitations of claim 1. Willenegger further teaches the step of determining an earliest time that a grant of access to the reverse link traffic channel can be conveyed to a mobile station and where the apparatus further comprises a means for conveying the grant of access to the mobile station at or after the determined earliest time (page 11, lines 27-32; where 5 msec. is an earliest time when the mobile station is aware of its signal being detected and where the access to the channel comes after the 5 msec.).

Regarding claims 23 and 24, Bender in view of Willenegger teaches all the limitations of claim 8. Willenegger further teaches where the means for generating a grant of access to the communication channel comprises a means for determining an earliest time that a grant of access to the reverse link traffic channel can be conveyed to a mobile station and where the apparatus further comprises a means for conveying the grant of access to the mobile station at or after the determined earliest time (page 11, lines 27-32; where 5 msec. is an earliest time when the mobile station is aware of its signal being detected and where the access to the channel comes after the 5 msec.).

3. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:00 a.m. - 3:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Art Unit: 2684

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.

  
Angelica Perez  
(Examiner)  
NAY MAUNG  
SUPERVISORY PATENT EXAMINER

Art Unit 2684

January 14, 2005